

Appendices

Appendix A. Full regression results for difference-in-difference analysis of STLDI policy impact on ACA benchmark plans premiums, 2014-2021.

VARIABLES	(Main Model)	(Sensitivity Model)
Ban on short term plans	55.58 (38.19)	86.72** (42.24)
Trump policy 2018-2021*Short term plans for 24 months	24.53 (24.61)	14.91 (23.64)
Trump policy 2018-2021*Short term plans for 12 months	-76.74*** (27.44)	-106.4*** (32.72)
Trump policy 2018-2021*Short term plans for 6 months	-62.65** (25.01)	-84.14*** (27.07)
Trump policy 2018-2021*Short term plans for 3 months	3.729 (29.60)	-4.276 (35.04)
Trump policy 2018-2021*Ban on short term plans	-87.60*** (32.33)	-121.6*** (40.76)
Policy change in 2016		-150.0** (56.50)
Policy change in 2016*Short term plans for 24 months		-21.60 (25.62)
Policy change in 2016*Short term plans for 12 months		-61.01** (25.68)
Policy change in 2016*Short term plans for 6 months		-40.36 (25.66)
Policy change in 2016*Short term plans for 3 months		-16.22 (27.37)
Policy change in 2016*Ban on short term plans		-63.85** (29.23)
Share of young adults	-3,711 (2,806)	-3,386 (2,818)
Income	-0.00488 (0.00451)	-0.00445 (0.00464)
Constant	1,273*** (346.3)	1,213*** (371.4)
Observations	408	408
R-squared	0.734	0.740
Number of states	51	51

Notes: Robust standard errors clustered at the state-level are in parentheses

*** p<0.01, ** p<0.05, * p<0.1

The model includes states and years fixed effects

Appendix B. Unadjusted Difference-in-difference analysis of STLDI policy impact on ACA benchmark plans premiums, 2014-2021

	(Main model without control variables)
VARIABLES	
Ban on short term plans	46.68 (30.50)
Trump policy 2018-2021*Short term plans for 24 months	37.98* (19.03)
Trump policy 2018-2021*Short term plans for 12 months	-67.61** (25.68)
Trump policy 2018-2021*Short term plans for 6 months	-77.64*** (23.97)
Trump policy 2018-2021*Short term plans for 3 months	4.967 (29.79)
Trump policy 2018-2021*Ban on short term plans	-111.1*** (30.50)
Constant	501.6*** (14.64)
Observations	408
Number of states	51
R-squared	0.727

Notes: Robust standard errors clustered at the state-level are in parentheses

*** p<0.01, ** p<0.05, * p<0.1

The model includes states and years fixed effects, share of young adults and income are excluded.

Appendix C. Difference-in-difference estimates of STLDI policy impact on ACA benchmark plans premiums, 2014-2021. (Data for 2018 are excluded)

	(Premiums model)
VARIABLES	
Ban on short term plans	12.80 (42.48)
Trump policy 2018-2021*Short term plans for 24 months	34.31 (24.32)

Trump policy 2018-2021*Short term plans for 12 months	-68.47*** (23.17)
Trump policy 2018-2021*Short term plans for 6 months	-65.36** (25.66)
Trump policy 2018-2021*Short term plans for 3 months	14.73 (28.51)
Trump policy 2018-2021*Ban on short term plans	-70.88* (36.86)
Share of young adults	-2,712 (2,779)
Income	-0.00577 (0.00429)
Constant	1,209*** (337.1)
Observations	357
Number of states	51
R-squared	0.739

Notes: Robust standard errors clustered at the state-level are in parentheses

*** p<0.01, ** p<0.05, * p<0.1

The model includes states and years fixed effects. Data for 2018 are excluded.

Appendix D. Event study analysis of policy impact on ACA benchmark plans premiums, 2014-2021

VARIABLES

2015*Short term plans for 24 months	-20.14** (9.231)
2016*Short term plans for 24 months	-27.09 (22.49)
2017*Short term plans for 24 months	-38.05 (41.12)
2015*Short term plans for 12 months	4.171 (12.78)
2016*Short term plans for 12 months	-24.33 (25.94)
2017*Short term plans for 12 months	-95.38** (39.28)
2015*Short term plans for 6 months	9.761 (15.30)

2016*Short term plans for 6 months	-15.53 (22.00)
2017*Short term plans for 6 months	-55.13 (44.11)
2015*Short term plans for 3 months	8.106 (14.63)
2016*Short term plans for 3 months	1.088 (22.97)
2017*Short term plans for 3 months	-25.28 (42.19)
2015*Ban on short term plans	-2.717 (16.53)
2016*Ban on short term plans	-27.00 (27.61)
2017*Ban on short term plans	-102.6** (49.11)
2018*Short term plans for 24 months	37.25 (46.75)
2018*Short term plans for 12 months	-127.9** (53.97)
2018*Short term plans for 6 months	-68.85** (33.65)
2018*Short term plans for 3 months	-26.34 (47.26)
2018*Ban on short term plans	-155.2*** (46.06)
2019*Short term plans for 24 months	34.06 (28.54)
2019*Short term plans for 12 months	-109.2** (41.71)
2019*Short term plans for 6 months	-84.57** (33.16)
2019*Short term plans for 3 months	14.34 (45.62)
2019*Ban on short term plans	-144.3*** (52.42)
2020*Short term plans for 24 months	-5.099 (26.57)
2020*Short term plans for 12 months	-111.4*** (36.88)
2020*Short term plans for 6 months	-82.67*** (29.22)
2020*Short term plans for 3 months	16.19 (37.23)
2020*Ban on short term plans	-102.5* (55.18)

2021*Short term plans for 24 months	-42.92 (42.42)
2021*Short term plans for 12 months	-72.18** (30.41)
2021*Short term plans for 3 months	-79.12*** (29.22)
2021*Ban on short term plans	-2.232 (30.27)
2021*Ban on short term plans	-84.56 (51.31)
Share of young adults	(76.63) -2,928 (3,099)
Income	-0.00514 (0.00487)
Constant	907.5** (362.1)
Observations	408
Number of states	51
R-squared	0.752

Notes: Robust standard errors clustered at the state-level are in parentheses

*** p<0.01, ** p<0.05, * p<0.1

The model includes states and years fixed effects variables

Appendix E. Difference-in-difference estimates of STLDI policy impact on ACA benchmark plans premiums after dropping the expansion years for states that expanded Medicaid after Trump's STLDI policies took effect, 2014-2021.

VARIABLES	(Premium model)
Ban on short term plans	105.824 (37.91073)
Trump policy 2018-2021*Short term plans for 24 months	28.03618 (25.05793)
Trump policy 2018-2021*Short term plans for 12 months	-73.66971 ** (27.33462)
Trump policy 2018-2021*Short term plans for 6 months	-59.5902 ** (25.42269)
Trump policy 2018-2021*Short term plans for 3 months	6.707964 (31.27107)
Trump policy 2018-2021*Ban on short term plans	-84.44615** (33.10621)

Share of young adults	-3578.409 (2884.149)
Income	-.0050009 (.0049048)
Constant	977.3669 *** (319.5612)
Observations	394
Number of states	51
R-squared	0.792

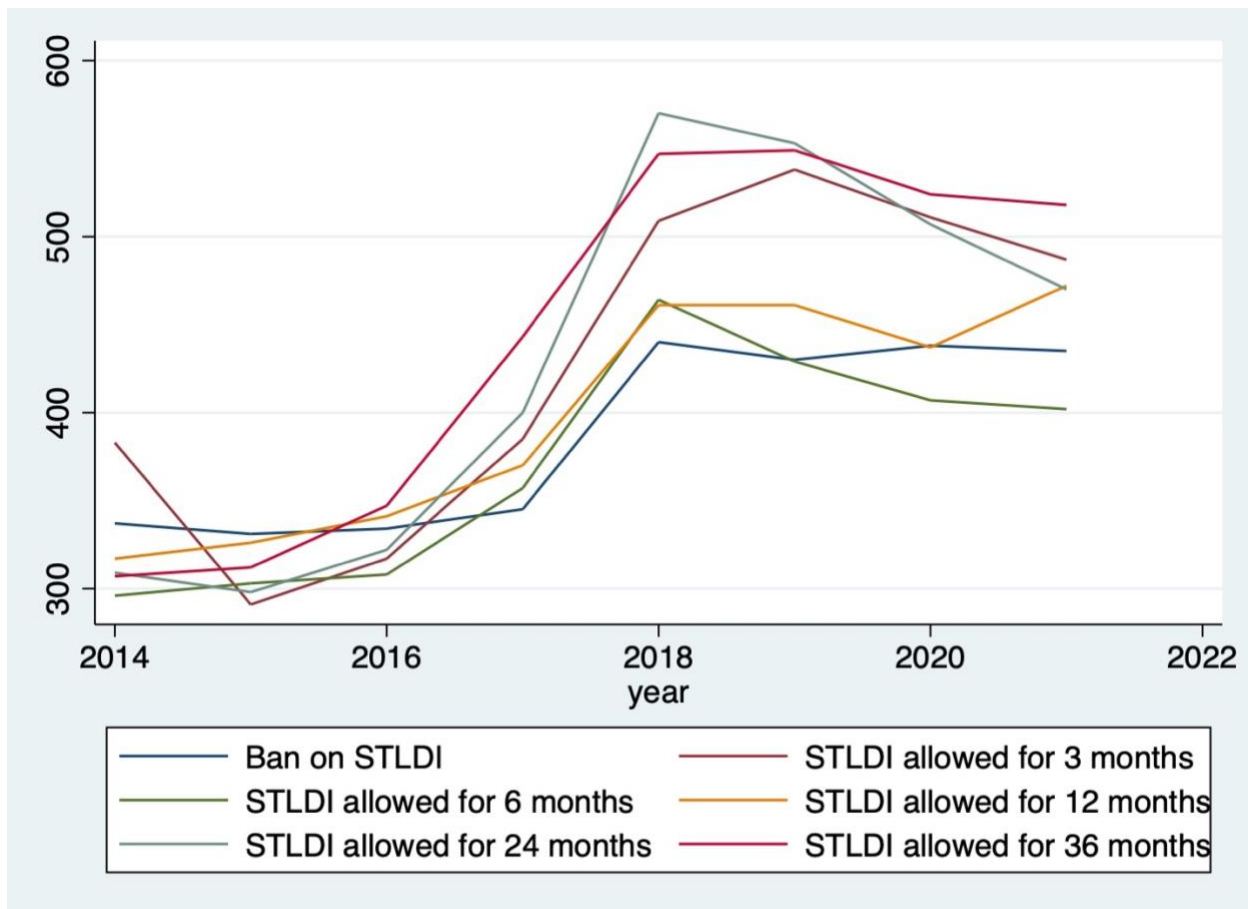
Notes: Robust standard errors clustered at the state-level are in parentheses

*** p<0.01, ** p<0.05, * p<0.1

The model includes states and years fixed effects variables

Data for states that expanded Medicaid in 2019-2021 are excluded (Virginia (STLDI 12), Maine (STLDI 6) in 2019, in Utah (STLDI 36), Idaho (STLDI 36), and Nebraska (STLDIO 36) in 2020, Oklahoma (STLDI 36) and Missouri (STLDI 36) in 2021)

Appendix F. Change in Premiums by STLDI duration



Appendix G . Full regression results from difference-in-difference analysis of STLDI policy impact on uninsured rate

VARIABLES	(Uninsured Model)	(Sensitivity Model)
Ban on short term plans	-0.00281 (0.00399)	-0.00487 (0.00556)
Trump policy 2018-2021*Short term plans for 24 months	0.00482* (0.00242)	0.00663** (0.00287)
Trump policy 2018-2021*Short term plans for 12 months	-0.00337 (0.00584)	-0.00496 (0.00908)
Trump policy 2018-2021*Short term plans for 6 months	0.000591 (0.00222)	0.000732 (0.00329)
Trump policy 2018-2021*Short term plans for 3 months	0.00273 (0.00260)	0.00528 (0.00363)
Trump policy 2018-2021*Ban on short term plans	-0.000705 (0.00340)	0.00172 (0.00514)
Policy change in 2016		-0.0172** (0.00670)
Policy change in 2016*Short term plans for 24 months		0.00382* (0.00204)
Policy change in 2016*Short term plans for 12 months		-0.00286 (0.00662)
Policy change in 2016*Short term plans for 6 months		-0.000228 (0.00289)
Policy change in 2016*Short term plans for 3 months		0.00504 (0.00319)
Policy change in 2016*Ban on short term plans		0.00398 (0.00383)
Share of young adults	0.164 (0.283)	0.141 (0.272)
Income	-9.55e-07** (4.73e-07)	-1.08e-06** (4.71e-07)
Constant	0.126** (0.0529)	0.136*** (0.0494)
Observations	408	408
R-squared	0.693	0.701
Number of states	51	51

Notes: Robust standard errors clustered at the state-level are in parentheses

*** p<0.01, ** p<0.05, * p<0.1

The model includes states and years fixed effects

Appendix H . Unadjusted egression results of the difference-in-difference estimates of STLDI policy impact on uninsured rate (share of young adults and state income are excluded)

VARIABLES	(Uninsured model)
Ban on short term plans	-0.000819 (0.00373)
Trump policy 2018-2021*Short term plans for 24 months	0.00443** (0.00200)
Trump policy 2018-2021*Short term plans for 12 months	-0.00246 (0.00581)
Trump policy 2018-2021*Short term plans for 6 months	-0.000759 (0.00248)
Trump policy 2018-2021*Short term plans for 3 months	0.00220 (0.00259)
Trump policy 2018-2021*Bab on short term plans	-0.00328 (0.00373)
Constant	0.0838*** (0.00155)
Observations	408
Number of states	51
R-squared	0.684

Notes: Robust standard errors clustered at the state-level are in parentheses

*** p<0.01, ** p<0.05, * p<0.1

The model includes states and years fixed effects, share of young adults and state income are excluded

Appendix I . Full regression results of the difference-in-difference estimates of STLDI policy impact on uninsured rate (data for 2018 are excluded)

VARIABLES	(Uninsured model)
Ban on short term plans	-0.00370 (0.00423)

Trump policy 2018-2021*Short term plans for 24 months	0.00534** (0.00255)
Trump policy 2018-2021*Short term plans for 12 months	-0.00356 (0.00567)
Trump policy 2018-2021*Short term plans for 6 months	0.00146 (0.00238)
Trump policy 2018-2021*Short term plans for 3 months	0.00269 (0.00286)
Trump policy 2018-2021*Ban on short term plans	-1.72e-05 (0.00360)
Share of young adults	0.101 (0.317)
Income	-1.01e-06** (4.79e-07)
Constant	0.137** (0.0555)
Observations	357
Number of states	51
R-squared	0.701

Notes: Robust standard errors clustered at the state-level are in parentheses

*** p<0.01, ** p<0.05, * p<0.1

The model includes states and years fixed effects, data for 2018 are excluded

Appendix J. Event Study analysis of STLDI policy impact on uninsured rate

VARIABLES	Uninsured model
2015* Short term plans for 24 months	0.00899*** (0.00153)
2016* Short term plans for 24 months	0.0103*** (0.00295)
2017* Short term plans for 24 months	0.00713** (0.00276)
2015* Short term plans for 12 months	0.00646 (0.00497)
2016* Short term plans for 12 months	0.00506 (0.00739)
2017* Short term plans for 12 months	-0.00263 (0.0109)
2015* Short term plans for 6 months	-0.00152 (0.00336)
2016* Short term plans for 6 months	0.00106 (0.00417)

2017* Short term plans for 6 months	-0.00168 (0.00470)
2015* Short term plans for 3 months	0.00725* (0.00390)
2016* Short term plans for 3 months	0.00946** (0.00454)
2017* Short term plans for 3 months	0.00843* (0.00456)
2015* Ban on short term plans	0.00754** (0.00367)
2016* Ban on short term plans	0.00972* (0.00547)
2017* Ban on short term plans	0.00788 (0.00617)
2018* Short term plans for 24 months	0.00960*** (0.00330)
2018* Short term plans for 12 months	0.000338 (0.0125)
2018* Short term plans for 6 months	-0.000734 (0.00489)
2018* Short term plans for 3 months	0.00942** (0.00468)
2018* Ban on short term plans	0.00719 (0.00719)
2019* Short term plans for 24 months	0.0107*** (0.00321)
2019* Short term plans for 12 months	-0.000145 (0.0106)
2019* Short term plans for 6 months	0.00163 (0.00506)
2019* Short term plans for 3 months	0.00862* (0.00484)
2019* Ban on short term plans	0.00703 (0.00726)
2020* Short term plans for 24 months	0.0113*** (0.00325)
2020* Short term plans for 12 months	-0.000240 (0.0109)
2020* Short term plans for 6 months	0.00187 (0.00483)
2020* Short term plans for 3 months	0.00870* (0.00471)
2020* Ban on short term plans	0.00705 (0.00702)
2021* Short term plans for 24 months	0.0117*** (0.00351)

2021* Short term plans for 12 months	-0.000956 (0.0110)
2021* Short term plans for 6 months	0.00263 (0.00475)
2021* Short term plans for 3 months	0.00913* (0.00480)
2021* Ban on short term plans	0.00863 (0.00729)
Share of young adults	0.159 (0.270)
Income	-1.04e-06* (5.26e-07)
Constant	0.136*** (0.0460)
Observations	408
Number of states	51
R-squared	0.720

Notes: Robust standard errors clustered at the state-level are in parentheses

*** p<0.01, ** p<0.05, * p<0.1

The model includes states and years fixed effects

Appendix K . Difference-in-difference estimates of STLDI policy impact on uninsured rate after dropping the expansion years for states that expanded Medicaid after Trump's STLDI policies took effect, 2014-2021.

VARIABLES	(Uninsured model)
Trump policy 2018-2021*Short term plans for 24 months	0.0046657 * (0.002528)
Trump policy 2018-2021*Short term plans for 12 months	-0.0034676 (0.0058952)
Trump policy 2018-2021*Short term plans for 6 months	0.0005159 (0.0022993)
Trump policy 2018-2021*Short term plans for 3 months	0.003319 (0.0026026)
Trump policy 2018-2021*Ban on short term plans	-0.0007873 (0.0034356)
Share of young adults	0.1445048 (0.2816867)
Income	-9.42e-07 (4.89e-07)

Constant	0.1363977 ** (0.0463726)
----------	------------------------------

Observations	394
--------------	-----

Number of states	51
------------------	----

R-squared	0.240
-----------	-------

Notes: Robust standard errors clustered at the state-level are in parentheses

*** p<0.01, ** p<0.05, * p<0.1

The model includes states and years fixed effects variables

Data for states that expanded Medicaid in 2019-2021 are excluded (Virginia (STLDI 12), Maine (STLDI 6) in 2019, in Utah (STLDI 36), Idaho (STLDI 36), and Nebraska (STLDIO 36) in 2020, Oklahoma (STLDI 36) and Missouri (STLDI 36) in 2021)